

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GEORGE G. WICKS

Appeal No. 95-1645
Application No. 07/866,780¹

ON BRIEF

Before JOHN D. SMITH, WEIFFENBACH and WEIMAR, Administrative Patent Judges.

WEIMAR, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the examiner's decision finally rejecting claims 1-9 and 11-21, all of the claims pending in the application.

Claim 1 is illustrative of the subject matter and reads as follows:

¹ Application for patent filed April 1, 1992.

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1. A method for encapsulating wastes, said method comprising the steps of:
 applying microwave energy to said wastes to raise the temperature of said wastes to a first temperature, said first temperature sufficient to incinerate organic material in said wastes;
 incinerating said organic material;
 applying microwave energy to said wastes to raise the temperature of said wastes from said first temperature to a second temperature, said second temperature being higher than said first temperature;
 holding said waste at said temperature until said waste melts; and
 allowing said melted waste to cool.

The single reference relied upon by the examiner is:

Hardwick et al. (Hardwick), "The Vitrification of High-Level Wastes Using Microwave Power," in International Seminar on Chemistry and Process Engineering for High-Level Liquid Waste Solidification, pp. 53-67, (June, 1981).

Claims 1-9 and 11-21 stand rejected under 35 U.S.C. § 103 over Hardwick. We reverse this rejection.

BACKGROUND

Claims 1-9 and 11-21 are directed to methods of treating wastes to obtain a "glass" encased solid product. As discussed on pages 1 and 2 of the specification, the methods are particularly useful for encapsulating hazardous wastes and reducing the amount of space dedicated to disposing of these wastes. Vitrification of wastes, particularly radioactive

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waste, was known prior to the date of the claimed invention, however the specific use of microwave energy in the specific manner claimed is the inventive contribution of the disclosure and claims at issue herein.

DISCUSSION

Claims 1-9 and 11-21 stand rejected under 35 U.S.C. § 103 over Hardwick. Hardwick teaches vitrification of particular wastes using microwave energy. Hardwick is silent with respect to incineration or incineration temperatures. All of the claims specifically recite applying both a first incineration temperature and a second higher temperature to the waste being treated. However, the examiner concludes that the overall process claimed and the end result are the same as that disclosed by Hardwick. With respect to the first and second temperatures the examiner states on page 4 of the Examiner's Answer that:

the microwave heating taught by the Hardwick reference would inherently include a low and a high temperature.

The examiner has not pointed to any recitation of low and high temperatures in Hardwick. We presume that the examiner is referring to the fact that to reach a high temperature one

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must necessarily go through lower temperatures, thus any material heated to vitrification temperatures went through incineration temperatures as it was achieving the higher temperature.

We cannot agree with the examiner's position. The exposure of waste materials to two separate temperatures each designed to achieve a specific result is clearly the invention contemplated in the disclosure. It is not reasonable to read the claims, including claim 1, as inclusive of a single heat treatment which reaches temperatures in excess of the first incineration temperature claimed. See the specification from the paragraph bridging pages 5 and 6 through line 14 of page 6. For example lines 11-14 of page 6 state:

At this first, intermediate temperature, no significant melting of silicates present will take place although some materials will melt or soften. After the organics are burned off, the application of microwave energy can resume.

The specification states that the intention of the first process is to incinerate all the organics present and by so doing remove the released particulates and off-gases before vitrification takes place. Hardwick neither expressly nor

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inherently teaches such a two temperature process. The examiner has not established that Hardwick teaches both steps, nor that Hardwick suggests the claimed combination of two heating steps each at a different temperature and designed for a different effect. Thus, we fail to find a *prima facie* case of obviousness and reverse this rejection.

CONCLUSION

The decision of the examiner refusing to allow claims 1-9 and 11-21 under 35 U.S.C. § 103 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

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REVERSED

JOHN D. SMITH)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
CAMERON WEIFFENBACH)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
ELIZABETH C. WEIMAR)	
Administrative Patent Judge)	

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Judge WEIMAR

Judge WEIFFENBACH

Judge SMITH, JOHN

DECISION: **REVERSED**

Send Reference(s): Yes No
or Translation(s)

Panel Change: Yes No

3-Person Conf. Yes No

Heard: Yes No

Remanded: Yes No

Index Sheet-2901 Rejection(s): _____

Acts 2: _____

Palm: _____

Mailed:

Updated Monthly Disk: _____

Updated Monthly Report: _____